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Senators, Congressmen, Please Heed the Call: Ensuring the Advancement of Digital Technology Through the Twenty-First Century.

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Cover Page Footnote

Professor Sonya Katal, Sam Moore, Mike Lane. Mom, Dad, Rachel, Bryn, and Grandpop Carl

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Andrew Sparkler*

INTRODUCTION

Imagine the following scenario: a sixty-six year old grandmother whose computer cannot download music is sued for illegally sharing over two thousand songs over the Internet.[1] Surprisingly, this account is not the basis for a *Saturday Night Live* skit, but it actually occurred when the Recording Industry Association of America ("RIAA") filed lawsuits against 261 individuals suspected of unlawfully downloading music over the Internet.[2] This scenario illustrates the inherent problems with recent legislation that regulates the Internet.[3] The legal actions initiated by the RIAA signify only the latest events in a spate of

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1 *See* Wired News, *RIAA Goes After the Wrong Gal*, *at* http://www.wired.-com/news/digiwood/0%2C1412%2C60581%2C00.html (Sept. 24, 2003) (exposing a case of mistaken identity where the Recording Industry Association of America ("RIAA") erroneously sued a Massachusetts woman for illegally downloading music).

2 *See* Wired News, *RIAA Lawsuit Orgy Underway*, *at* http://www.wired.com/-news/digiwood/0,1412,60341,00.html (Sept. 8, 2003) (reporting on the flood of RIAA lawsuits filed against hundreds of individuals) [hereinafter Wired News, *RIAA Lawsuits*].

3 *Id.*

lawsuits and legislation designed to stop the widespread piracy of copyrighted materials on the Internet.[4]

Music industry litigation may appear more frequently in the media, but there are also many instances of both the government and private actors filing suits in arenas wholly unrelated to music.[5] The music industry, however, is particularly susceptible to this sort of piracy due to the small file size of the average song,[6] the recent explosion in residential broadband service,[7] the proliferation of CD recorders in home computers,[8] and the popularity of file-sharing programs such as Napster and Morpheus.[9] These factors all allow for a fast, almost perfect replication of copyrighted works.[10] Nonetheless, as the parties involved in file sharing become increasingly numerous and aggressive,[11] one must examine the statutory bases of these lawsuits.

The record industry's cases are grounded in legislation that in large part applies to the Internet.[12] The RIAA alleges that their lawsuits are necessary to ensure that artists continue to create music,[13] but in reality, current Internet legislation and related

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4 *See* discussion *infra* Parts I.B–.D.

5 *See generally infra* notes 101, 109 and accompanying text.

6 *See* Brian Leubitz, *Digital Millennium? Technological Protections for Copyright on the Internet*, 11 TEX. INTELL. PROP. L.J. 417, 420 (2003) (explaining how, through compression, prohibitively large audio files can be reduced in size and shared).

7 *See id.* at 420 (reporting that at the end of 2001, the number of North American home subscribers to cable modem, DSL (or digital subscriber line), satellite, and fixed wireless services almost doubled, reaching a total of 13.3 million by the end of the year).

8 Both Gateway and Dell have CD recorders as a standard option on many of their desktop and laptop options. *See generally* Dell.com, *at* http://www.dell.com (last visited Apr. 14, 2004); Gateway.com, *at* http://www.gateway.com (last visited Apr. 14, 2004). Additionally, if the recorders do not come as a standard option, they can be added for as little as fifty dollars. *See* Dell.com; Gateway.com.

9 The Napster and Morpheus programs allow users to download files shared on the computers of other users, free of charge. For a general overview of file sharing, see Loyola Marymount Univ., *Information Technology Services*, *at* http://www.lmu.edu/-pages/5572.asp (reviewing the basics of file sharing) (last visited Apr. 14, 2004).

10 *See* Leubitz, *supra* note 6, at 420.

11 *See* Lee Gomes, *RIAA Takes Off Gloves in Mounting Its Fight Against Music Thieves*, WALL ST. J., Sept. 15, 2003 at B1 (stating that the RIAA's lawsuit against a twelve-year-old girl invited widespread criticism).

12 *See infra* notes 132–39 and accompanying text.

13 *See* Roy Mark, *RIAA Files 261 Lawsuits Against Alleged Music Pirates*, internetnews.com, *at* http://www.internetnews.com/ec-news/article.php/3073931 (Sept. 8,

lawsuits work to discourage innovation in the arts[14]—a notion antithetical to the U.S. Constitution.[15]

To correct the problem of overly broad legislation, it is first necessary to realize what Congress is trying to accomplish by passing these laws.[16] Accordingly, Part I of this Note traces the origins of copyright law through the Constitution and the Copyright Act of 1976. It then examines the Audio Home Recording Act, the No Electronic Theft Act, and how these acts anticipated the Digital Millennium Copyright Act. Next, Part I summarizes case law relevant to the illegal copying of audio materials, focusing on the lawsuits filed against Napster and also examines the origins of digital rights management ("DRM"), a technology that implants anti-pirating code into intellectual property. Part II demonstrates how the application of laws designed to stop piracy on the Internet may infringe on fundamental Constitutional rights. This part is further separated into sections that address violations of Internet law in the context of both non-music related and music related situations.

Part III presents the argument that laws like the DMCA are detrimental to the advancement of technology and that technology must be allowed to flourish without significant legislative interference. This part asserts that a music company's decision to license its catalogs to online distributors is a successful business model that other industries should emulate. Part III focuses on the advantages of DRM, and specifically, how this technology can assist a wide spectrum of businesses and products toward making a profitable shift into the retailing of intellectual property over the Internet. In this manner, DRM serves as an efficient, ideal replacement for harmful legislation like the DMCA. If executed properly, DRM can best balance the preservation of long-

2003) (quoting RIAA President Cary Sherman: "[W]hen your product is being regularly stolen, there comes a time when you have to take appropriate action. We simply cannot allow online piracy to continue destroying the livelihoods of artists, musicians, songwriters, retailers, and everyone in the music industry").

14 *See* discussion *infra* Part III.

15 *See generally* U.S. CONST. art. I, § 8, cl. 8.

16 *See* discussion *infra* Part I.

established copyright policies with safeguards that allow businesses to flourish without fear of piracy.

I. THE MODERN ERA OF COPYRIGHT LAW

Copyright law in the United States originates in Article I, Section VIII of the Constitution, which states that "[t]he Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[17] The boundaries sketched by the country's forefathers, however, have proven to be fluid.[18] The meaning and potency of a copyright protection and regulation has changed many times since the Constitution's ratification.[19]

A. The Copyright Act of 1976

The Copyright Act of 1976 ("1976 Copyright Act")[20] was the first modern legislation relating to Congress' authority under Article I, Section VIII of the Constitution.[21] For the purposes of analyzing the intersection of copyright law and the Internet, this Act represents a legislative foundation[22] because it provides copyright owners with five exclusive rights over their original

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17 U.S. CONST. art. I, § 8, cl. 8.

18 *See generally* Eldred v. Ashcroft, 537 U.S. 186 (2003), *reh'g denied*, 538 U.S. 916 (2003) (finding that adding twenty years to the validity of a copyright does not violate the "limited Times" requirement in the Constitution's Copyright Clause). This was the fourth time the length of a copyright had been extended— similar provisions were made in 1831, 1909, and 1976. *Id.* at 196.

19 *See id.*

20 17 U.S.C. §§ 101–1332 (2002).

21 *See generally* Stephanie Skasko Rosenberg, *Anticipating Technology: A Statute Bytes the Dust in* Recording Industry Ass'n of America v. Diamond Multimedia Systems, Inc., 45 VILL. L. REV. 483, 486–87 (2000).

22 *See* Greg Adams, *A Proposal for Rebalancing the Digital Partnership Between Content Providers and Internet Gate-Keepers*, 13 DEPAUL-LCA J. ART & ENT. L. 203, 208 (2003) (explaining that the congressional aim of the 1976 Copyright Act is "to balance public access to creative works with an artist's right to control his or her work during a specified term").

works.[23] An owner will prevail in an infringement case if he or she can prove ownership of a valid copyright and that another person violated one of the copyright owner's exclusive rights.[24]

Even if the owner can prove these elements, the infringement in question still may be subject to some limitations.[25] These are statutory safe harbors that permit copyright violations.[26] Such limitations are termed abandonment and fair use.[27] To prevail in a cause of action for abandonment, a defendant must show that the copyright holder intentionally surrendered his or her rights in the work, as evidenced by an explicit act.[28] To establish fair use, the defendant must show that he or she "acted fairly and in good faith" and used the copyrighted material in a "reasonable manner."[29] The fair use exception to copyright applies if the material in question is only used for noncommercial or nonprofit ends, if the fair user exploited only a portion of the copyrighted material in question,[30] and if the effect of the use upon the potential market is harmful.[31] Following the 1976 Copyright Act, other important legislation developed that significantly impacted the rights of musical copyright owners.[32]

B. The Audio Home Recording Act

In the 1980s, music listeners frequently copied music onto analog tapes.[33] The music industry perhaps overlooked such

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[23] *Id.* (listing the five exclusive rights granted to copyright owners: "(1) the right of reproduction, (2) the right of adaptation, (3) the right of distribution, (4) the right of performance, and (5) the right to display").

[24] *See id.* at 208–09.

[25] *See id.* at 209.

[26] *See id.*

[27] *Id.*

[28] Capitol Records, Inc. v. Naxos of Am., Inc., 262 F. Supp. 2d 204, 211 (S.D.N.Y. 2003), *summary judgment granted, motion denied*, 274 F. Supp. 2d 472 (S.D.N.Y. 2003) (defining abandonment as a defense to copyright infringement).

[29] 18 AM. JUR. 2D *Copyright and Literary Property* § 80 (1985).

[30] *See generally* Triangle Publ'ns, Inc. v. Knight-Ridder Newspapers, Inc., 626 F.2d 1171, 1174–75 (5th Cir. 1980) (finding that the fair use exception to copyright infringement applies only in specific instances).

[31] *See id.* at 1175.

[32] *See* discussion *infra* Parts I.B–.D.

[33] *See* Andrew S. Muroff, *Some Rights Reserved: Music Copyright in the Digital Era*, 1997 DET. C.L. MICH. ST. U. L. REV. 1241, 1250 n.63 (1997) (explaining that, after a

copying because the recordings' quality was inferior to the master copy.[34] Sony, Phillips, and Toshiba, among others,[35] however, later created the digital audio tape ("DAT"), which allowed users to make identical copies of the source media.[36] The creation of DAT prompted heavy lobbying from the music industry to ensure better copyright protection for record labels and musicians.[37] In response to this pressure, Congress passed the Audio Home Recording Act in 1992 ("AHRA").[38] The AHRA attempted to balance the interests of the recording industry and makers of DAT recorders[39] by protecting the DAT producers from copyright infringement suits to which they otherwise would be subject in accordance with the 1976 Copyright Act.[40] These DAT recorder manufacturers are also required to pay a set amount of royalties to a fund that compensates various members of the recording industry.[41] Additionally, the AHRA mandates that the original, "master" DAT recorder may make unlimited "first generation" copies of music, but prohibits further copies from the first generation tapes.[42] This caveat highlights an important difference between digital copying in the pre-Internet age and the present

surge in the duplication of vinyl records, the personal copyright infringement moved on to the audio cassette technology).

34 *See* Katherine Reynolds Lewis, *Consumers Fight System Protecting CD Copyright*, SEATTLE TIMES, Mar. 18, 2002, at C3 ("While an analog copy such as a tape cassette is a degraded version of the original, a CD can be copied on the Internet an unlimited number of times without losing clarity."); *see also* David Balaban, *The Battle of the Music Industry: The Distribution of Audio and Video Works Via the Internet, Music and More*, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 235, 246 (2001) ("Since successive copies of tapes tended to degrade in sound quality even further, the consumer's ability to distribute music to others was very limited, ensuring the need for consumers to purchase originals of the sound recordings.").

35 *See* Muroff, *supra* note 33, at 1251 n.73 (listing the manufacturers who were involved in a lawsuit that eventually led to the drafting of the Audio Home Recording Act of 1992).

36 *See generally id.* at 1243; Balaban, *supra* note 34, at 246.

37 Balaban, *supra* note 34, at 247.

38 *Id.*; Audio Home Recording Act of 1992 [AHRA], 17 U.S.C. §§ 1001–10 (2002).

39 Balaban, *supra* note 34, at 247.

40 *See id.*; *see also* Muroff, *supra* note 33, at 1251–53 (providing a brief history of the initial litigation and ensuing legislative compromise).

41 *See* Balaban, *supra* note 34, at 247 (citing the AHRA, at 17 U.S.C. § 1006 (1994)).

42 *See id.* at 249 (citing 138 CONG. REC. H9029 at 9043 (daily ed. Sept. 22, 1992)).

day.[43] In the pre-Internet age, the makers of the potentially infringing technology were inclined and able to implement a counter-technology that limited the amount of perfect copies made by the consumer.[44] Today, on the other hand, file-sharing programs not only allow for unlimited copies of songs, but actually encourage such practices where consumers pay for those copies.[45]

The AHRA significantly impacted the economic viability of the DAT.[46] At the outset, DAT recorders represented a promising technology, perhaps even one that could replace CDs.[47] Once Congress passed the AHRA, however, DAT recorders faded from the marketplace and CD technology became wildly successful.[48]

C. The No Electronic Theft Act

Congress passed the next piece of major Internet-related legislation, the No Electronic Theft ("NET") Act in December

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[43] *See infra* text accompanying notes 44–45.

[44] Extreme Tech, *Digital Content Protection*, *at* http://www.extremetech.com/article2/-0,3973,1153980,00.asp (last visited Apr. 1, 2004) (noting that the AHRA mandated all digital recorders be equipped with technology that limited the number of copies that could be made from a master copy); *see also* Muroff *supra* note 33, at 1253. While the AHRA was specifically targeted to address digital audio tape ("DAT") technology, the language of the statute may allow for regulation in other areas of digital technology. *See generally id.* at 1252–53.

[45] *See, e.g.*, iTunes, *Overview*, *at* http://www.apple.com/itunes/overview.html (last visited Apr. 1, 2004) (noting that songs can be burned onto CDs, listened to on home computers, or transferred to an iPod player). It should be noted, however, that although iTunes encourages consumers to download copies of songs for 99¢ each, it limits the number of copies that can be freely made from the downloaded songs. *See* Patrick Chinn, *iTunes: Free Music Download Software Is Much More Than a Music Player*, COMPUTING NEWS (Univ. of Or.), Winter 2004, at 20, *available at* http://cc.uoregon.edu/cnews/-winter2004/itunes.html (last visited Apr. 14, 2004).

[46] *See* Skasko Rosenberg, *supra* note 21, at 495 (commenting that "[s]hortly after passing the AHRA, the digital audio technology expected to overtake the market floundered on the store shelves").

[47] *See* Paul Veravanich, *Rio Grande: The Mp3 Showdown at High Noon in Cyberspace*, 10 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 433, 451 (2000) (stating that DAT never achieved the success that many expected).

[48] *See* CD Page, *A Brief History of DVD*, *at* http://www.cdpage.com/DVD/dvdhistory.-html (last visited Apr. 2, 2004) (noting that the CD audio player became one of the two most successful consumer electronics products); *see also* One Off, *History of the CD*, *at* http://www.oneoffcd.com/info/historycd.cfm (last visited Apr. 2, 2004) (stating that in 1990, twenty-eight percent of American homes have CDs).

1997[49] after a Massachusetts district court case that involved a computer bulletin board operator.[50] The court ruled that the operator, who made available unauthorized copies of copyrighted software, could not be prosecuted under federal copyright law because the government lacked proof that the operator received any financial gain from his activities.[51] As a result, the NET Act eliminated the financial gain requirement and, thus, facilitated proving criminal copyright infringement.[52] Now, the government must prove either that an infringer acted for financial gain or that the items reproduced or distributed have a total retail value of one thousand dollars.[53]

The NET Act does take into account certain defenses, such as the doctrines of first sale and fair use.[54] The first sale doctrine allows an individual who legally purchases copyrighted materials to freely distribute those particular items.[55] Meanwhile, the elements of the fair use doctrine within the NET Act mirror those of the 1976 Copyright Act.[56] Thus, the NET Act marks an official recognition by Congress of copyright infringement that result from file trading and software piracy on the Internet.[57]

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[49] *See* No Electronic Theft [NET] Act of 1997, Pub. L. No. 105–147, 111 Stat. 2678 (1997); *see* INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 499 (Merges et al. eds., 3d ed. 2003) [hereinafter INTELL. PROP. IN TECH. AGE].

[50] United States v. LaMacchia, 871 F. Supp. 535, 545 (D. Mass. 1994) (holding that, though the defendants' actions should be criminal, it is the province of the legislature, not the courts, to make such a decision).

[51] *See LaMacchia*, 871 F. Supp. at 545; INTELL. PROP. IN TECH. AGE, *supra* note 49, at 499.

[52] NET Act of 1997 § 2(b) (1997) (amending 17 U.S.C. § 506(a)).

[53] *Id.* For a detailed analysis of the amendments brought by the NET Act, see Dept. of Justice, The No Electronic Theft ("NET") Act, *at* http://www.usdoj.gov/criminal/-cybercrime/17-18red.htm (last visited Apr. 14, 2004).

[54] Robert Ditzion et al., *Computer Crimes*, 40 AM. CRIM. L. REV. 285, 301 (2003).

[55] *See* 17 U.S.C. § 109(a) (2002).

[56] *See* 17 U.S.C. §§ 101, 107. As codified in 17 U.S.C. § 107, a finding of fair use requires a consideration of the following factors:

> (1) the purpose and character of the use . . . ; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.

See also Ditzion et al., *supra* note 54, at 302; *supra* notes 29–31 and accompanying text.

[57] *See generally* Ditzion et al., *supra* note 54, at 300; *see also* Leubitz, *supra* note 6, at 420 (stating that the advent of MP3 technology coupled with the growing number of

D. The Digital Millennium Copyright Act

The Digital Millennium Copyright Act ("DMCA")[58] has significantly impacted many citizens: the rights of consumers, distributors of unauthorized intellectual property items, and the actual owners of that property are all affected by this law.[59] The DMCA was a direct response from Congress to copyright owners' rising fears that the widespread distribution of pirated works was imminent due to the increased prevalence of high-speed residential Internet connections combined with improved file-sharing technology.[60] The relevant portions of the DMCA cover two main areas.[61] Section 1201 focuses on prohibiting methods used to circumvent various technological protections of copyrighted works,[62] while section 512 provides amnesty for Internet service providers ("ISPs") that are accused of contributory or vicarious infringement as a result of subscribers who commit a copyright-related crime.[63]

Section 1201 of the DMCA is controversial because some of the anti-circumvention methods within the statute conflict with the fair use doctrine of the 1976 Copyright Act.[64] The fair use

residential broadband internet connections "enabled the expansion of Internet music sharing"). While sharing of music files was not widespread in 1997, it existed in at least a basic form, such as the capability to attach files to an e-mail message, or post files on a personal Web site for downloading—and its growth was foreseeable. *See generally* Kwansei Gakuin Univ. – Sch. of Policy Studies, *History of P2P*, *at* http://www.ksc.-kwansei.ac.jp/researchfair02/03/website/history.htm (last visited Apr. 14, 2004). Accordingly, this bill appears to be not so much prescient as preemptory. *See id.*

58 Digital Millennium Copyright Act [DMCA], 17 U.S.C. §§ 1201–05 (2002).

59 *Id.*

60 *See* INTELL. PROP. IN TECH. AGE, *supra* note 49, at 500 (citing S. REP. NO. 105-190, at 8 (1998), on the DMCA, which stated that "[d]ue to the ease with which digital works can be copied and distributed worldwide virtually instantaneously, copyright owners will hesitate to make their works readily available on the Internet without reasonable assurance that they will be protected against massive piracy").

61 17 U.S.C. §§ 512, 1201.

62 Eleanor M. Lackman, *Slowing Down the Speed of Sound: A Transatlantic Race to Head Off Digital Copyright Infringement*, 13 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1161, 1171 (2003).

63 *Id.*

64 *See* Ditzion et al., *supra* note 54, at 305; *see also* Universal Studios v. Reimerdes, 111 F. Supp. 2d. 294 (S.D.N.Y. 2000) (finding that posting decryption software for DVDs on a Web site does not qualify for the fair use defense and violates the DMCA); *supra* notes 29–31, 56 and accompanying text.

doctrine permits non-copyright holders to use copyrighted materials for noncommercial purposes like scholarship or research, but the DMCA's provisions for fair use are far narrower.[65] In recognition of the fact that specific provisions of section 1201 may be overly restrictive, the DMCA allows the Library of Congress to use discretion in granting certain exemptions to the above clauses,[66] but these narrow fair use allowances still impinge on traditional tenets of Copyright law.[67] Section 1203 allows private actors who are harmed in accordance with the DMCA to file a civil suit in U.S. district court,[68] while section 1204 allows criminal charges to be brought against those who violate this law.[69]

After Congress enacted the DMCA into law, the widespread sharing of music files on the Internet began to receive heavy scrutiny from both legislators and record labels.[70] One highly publicized and influential case involving file sharing was *A&M*

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[65] *See* INTELL. PROP. IN TECH. AGE, *supra* note 49, at 501 (explaining that "the ban on trafficking of circumvention devices (including instructions) puts the means for such access beyond the reach of all but the most technically adept—those possessing the ability to decrypt restricted works"). The specific text of section 1201(a) reads:

> No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that—
>
> (A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title;
>
> (B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or
>
> (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

17 U.S.C. § 1201(a)(2) (2002).

[66] 17 U.S.C. § 1201(a)(1)(C); INTELL. PROP. IN TECH. AGE, *supra* note 49, at 501.

[67] *See* discussion *infra* Part II; *see also* INTELL. PROP. IN TECH. AGE, *supra* note 49, at 501.

[68] 17 U.S.C. § 1203.

[69] *Id.* § 1204.

[70] *See generally* Megan E. Gray & Will Thomas DeVries, *The Legal Fallout From Digital Rights Management Technology*, COMPUTER & INTERNET LAW., Apr. 2003, at 20 (noting that worldwide CD sales dropped five percent in 2001, and the recording industry blames this drop on Internet music piracy and not on the effects of a recessed economy).

Records, Inc. v. Napster.[71] In late 1999, eighteen record labels and others in the music industry brought suit against Napster in federal district court seeking a preliminary injunction.[72] The plaintiffs claimed that Napster's file-sharing program was directly responsible for contributory and vicarious copyright infringement.[73] Napster argued that it did not commit copyright infringement because its servers only provided the use of a search engine[74] and argued that it should not be subject to liability even if individuals traded pirated music through its software.[75] Napster cited section 512(d) of the DMCA for the proposition that information locator tools may be subject to limited liability only.[76] Napster also asserted a fair use defense, citing section 107 of the 1976 Copyright Act.[77] The district court, however, concluded that Napster and its users were not engaging in any activity that would be considered fair use under the 1976 Copyright Act and that, because the plaintiffs had a good chance of prevailing in the suit, they were entitled to injunctive relief.[78]

On appeal, the Ninth Circuit issued a detailed opinion that ultimately declared the district court's holding to be overly broad because it required Napster to exert unreasonable control over its users.[79] Specifically, the Ninth Circuit required the plaintiffs to provide specific notice to Napster about which infringements were present on Napster's servers before the company could be held contributorily liable.[80] The Ninth Circuit modified the district

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[71] *See* A&M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896 (N.D. Cal. 2000) [hereinafter *Napster I*] (holding that Napster was likely guilty of vicarious and contributory copyright infringement and granting injunction sought by plaintiff), *rev'd in part*, 239 F.3d 1004 (9th Cir. 2001) [hereinafter *Napster II*].

[72] *See Napster I*, 114 F. Supp. 2d at 900.

[73] *See id.*; *see also* Balaban, *supra* note 34, at 276–87 (providing an in-depth analysis of the *Napster* case).

[74] *See Napster I*, 114 F. Supp. 2d at 903.

[75] *See id.*

[76] *Id.* at 919.

[77] Balaban, *supra* note 34, at 277; *see also supra* notes 29–31, 56 and accompanying text (reviewing factors that a court is to consider when determining if a copyright infringement is fair use).

[78] *See Napster I*, 114 F. Supp. 2d at 926.

[79] *See Napster II*, 239 F.3d at 1027 (holding that, while the preliminary injunction was overbroad in parts, the lower court was correct in its basic findings).

[80] *See id.*; *see also* Balaban, *supra* note 34, at 278.

court's ruling by enumerating a list of instances where Napster would be contributorily liable and where it would be vicariously liable.[81] On the present facts, the Ninth Circuit found that Napster's software directly contributed to the massive dissemination of pirated works, which resulted in economic loss to record labels and artists alike.[82]

The Ninth Circuit agreed with the district court's finding of vicarious infringement, but disagreed with the district court on its finding of contributory infringement.[83] As mentioned above, the Ninth Circuit held that Napster was not contributorily liable until it received specific knowledge from the plaintiffs of the alleged infringements.[84] Thus, while Napster was not liable for its previous actions, it would become subject to liability once the record companies alerted it of specific infringements.[85] The Ninth Circuit did find Napster to be vicariously liable for the infringements of its users because it had a financial interest in its member base.[86] The Ninth Circuit agreed with the district court that Napster was aware, at least on a general level, that its users

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[81] *See Napster II*, 239 F.3d at 1027 (finding that Napster is contributorily liable when it "receives reasonable knowledge of specific infringing files," or when it "knows or should know that such files" are on their servers and "fails to act to prevent viral distribution of the works"); *see also* Balaban, *supra* note 34, at 278. The court also found that Napster is vicariously liable "when it fails to affirmatively use its ability to patrol its system." *Napster II*, 239 F.3d at 1027. The court rejected Napster's claim that its services were akin to those in the case of *Recording Industry Association of America v. Diamond Multimedia Systems, Inc.*, where "space shifting" was deemed permissible. Balaban, *supra* note 34, at 279. In *Napster*, the Ninth Circuit held that there is no copyright infringement per se concerning a device which can receive, store, and re-play audio files that are stored on a personal computer. *See Napster II*, 239 F.3d at 1019. Space shifting is essentially the notion that if a copyrighted work is allowed in one medium—in this instance, a CD—then it is legal to transfer the works to another medium—in this instance, an MP3. *See* Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072 (9th Cir. 1999) [hereinafter *Diamond II*]; *see also infra* text accompanying notes 124–30.

[82] *See Napster II*, 239 F.3d at 1019.

[83] *See id.* at 1027.

[84] *See id.* at 1027; *see also* Balaban, *supra* note 34, at 282 (noting that the Ninth Circuit rejected the district court's finding that general knowledge of copyright infringement is enough to hold Napster liable of contributory liability).

[85] *Napster II*, 239 F.3d at 1027.

[86] *See id.* at 1016.

were committing mass copyright infringement.[87] The court noted that Napster's charge for advertising space would increase with its membership, and the number of members potentially could rise with more music available on the system.[88]

For these reasons, the Ninth Circuit found that Napster did have an obligation to oversee its servers to prevent potentially infringing activities.[89] The holding of the Ninth Circuit imposed an understandably large burden on Napster and, because the majority of the music being shared through its service was illegal,[90] Napster ceased operations soon after the Ninth Circuit issued its decision.[91]

E. Digital Rights Management

There is not a static, technological shape of digital rights management.[92] In general, DRM allows for the implementation of advanced technology within intellectual property—technology that gives the owner of the property control over the licensee.[93] An example of DRM is a CD that cannot be copied because DRM technology is embedded within the code of the CD.[94] Critics of

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87 *See id.* at 1016–17.

88 *See Napster I*, 114 F. Supp. 2d at 902; *see also* Balaban, *supra* note 34, at 284.

89 *See Napster II*, 239 F.3d at 1022.

90 *See* Balaban, *supra* note 34, at 276 (noting that plaintiff introduced evidence which found that up to eighty-seven percent of the music files being traded on Napster's service likely are pirated materials).

91 In October 2003 Napster resurfaced, this time with the blessing of some record labels, as a service that allows consumers to purchase music for approximately one dollar per song or ten dollars per full-length album. Napster, *at* http://www.napster.-com/facts.html (last visited Apr. 3, 2004); *see also* Brad King, *The Day the Napster Died*, Wired News, *at* http://www.wired.com/news/mp3/0%2C1285-%2C52540%2C00.html (May 15, 2002) (noting that on May 14, 2002, Napster was forced to shut down after its board of directors prevented a potential sale).

92 *See* Active Internet, *What Is Digital Rights Management and How Does It Work?*, *at* http://www.drmtools.com/how.asp (last visited April 13, 2004) (explaining how Active Internet, a company that sells digital rights management ("DRM") technology, can make use of different forms of encoding technology to protect copyrighted materials).

93 *See* Beth A. Thomas, *Solutions Are on Track: Digital File Sharing Spun in a Positive Light*, 6 VAND. J. ENT. L. & PRAC. 129, 132 (2003).

94 *See* Paul Boutin, *Philips Burning on Protection*, Wired.com, *at* http://www.wired.-com/news/politics/0%2C1283%2C50101%2C00.html (Feb. 4, 2002) (stating that copy protected CDs may not play in all CD players).

DRM allege that the technology is too susceptible to being hacked and that, even when it is not, it can cause errors on the media associated with the intellectual property.[95] Additionally, many critics believe that DRM will cause even greater changes to fair use exceptions to copyrights than those already imposed by the DMCA.[96] These critics, however, do not account for the increased efficacy and benefit that is possible through DRM if the DMCA is severely reformed or altogether repealed.[97]

II. BROAD INTERNET LEGISLATION INFRINGES ON FUNDAMENTAL RIGHTS OF COPYRIGHT LAW

Since the advent of statutes like the AHRA and the DMCA, courts have struggled to define the boundaries of this kind of copyright legislation[98]—a difficult task because if the laws are interpreted too narrowly, they risk being ineffective, but if they are interpreted too broadly, they may infringe on basic American freedoms.[99] Accordingly, it is beneficial to review various public and private actions that have been brought under the DMCA. For the purposes of this Note, the problems posed by the DMCA are easily parsed into two separate categories: those that involve music and music-related equipment, and those that involve other areas of intellectual property.

A. Computer Related Tensions

As discussed, a major source of litigation surrounding the DMCA is its tension with traditional notions of fair use within

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95 *See* Thomas, *supra* note 93 at 132–33.

96 *See id.* at 133; *see also* FRED VON LOHMANN, FAIR USE AND DIGITAL RIGHTS MANAGEMENT: PRELIMINARY THOUGHTS ON THE (IRRECONCILABLE?) TENSION BETWEEN THEM (2002) (prepared for the Electronic Frontier Foundation) [hereinafter VON LOHMANN, FAIR USE], *available at* http://www.eff.org/IP/DRM/fair_use_and_drm.html (last visited Apr. 15, 2004).

97 *See infra* Part III.

98 *See infra* Part II.A–.B.

99 *See generally* David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 685 (2000) (noting that "one must revert to the legislative history to gain an idea of Congress' intent in adopting the language of the statute").

copyright law.[100] An important case brought under the DMCA that illustrates this tension is *United States v. Elcom Ltd.*,[101] where a Russian programmer named Dimitry Sklyarov developed a program that decrypted the text of the Adobe Reader program.[102] Sklyarov's program allowed users to display an Adobe Acrobat file on a variety of media, including hand-held organizers, also known as personal data assistants ("PDAs").[103] This program violated provisions of the DMCA which prohibited the decryption of copyrighted materials.[104] Thus, when Sklyarov flew to Las Vegas for a convention, U.S. government agents arrested him.[105] Sklyarov's counsel brought up the salient point that the DMCA essentially allows for the prosecution of persons who are using re-copyrighted works within the boundaries of the law, and Sklyarov was eventually acquitted of the charges.[106] While the 1976 Copyright Act permits fair use of software that one already has purchased,[107] the DMCA prohibits such use if it incorporates anti-circumvention technology such as that employed by Sklyarov.[108]

A similar case to *Elcom* is *Felten v. Recording Industry Association of America*.[109] Here, Edward Felten, a Princeton professor, responded to a proposal put forth by the RIAA and the Secure Digital Music Initiative ("SDMI") to hack into the RIAA's

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[100] *See supra* notes 64–69 and accompanying text.

[101] 203 F. Supp. 2d 1111 (N.D. Cal. 2002) (holding that the DMCA is constitutional and rejecting defendants' motions to dismiss).

[102] *See* Elec. Frontier Found., *U.S. v. Elcomsoft & Sklyarov FAQ*, *at* http://www.eff.org/IP/DMCA/US_v_Elcomsoft/us_v_elcomsoft_faq.html (last visited Apr. 5, 2004) [hereinafter EFF, *Sklyarov FAQ*]; *see also* Gray & DeVries, *supra* note 70, at 24 (offering an overview of the case). The Adobe Reader program is an application that allows documents to be read on a computer. *See* Adobe, *What Is Adobe PDF?*, *at* http://www.adobe.com/products/acrobat/adobepdf.html (last visited Apr. 15, 2004). It is commonly used when documents are scanned into a computer and cannot be opened by traditional document-reading programs such as Microsoft Word or WordPerfect. *See id.*

[103] *See* EFF, *Sklyarov FAQ*, *supra* note 102.

[104] *Id.*; 17 U.S.C. § 1201 (2002).

[105] EFF, *Sklyarov FAQ*, *supra* note 102.

[106] *See* Gray & DeVries, *supra* note 70, at 24 (noting that the government allowed defendant Dimitry Sklyarov to return to Moscow in return for his testimony against Elcomsoft, which was later acquitted).

[107] *See* 17 U.S.C. § 101.

[108] *See* 17 U.S.C. § 1201.

[109] *See* Gray & DeVries, *supra* note 70, at 24–25. The case never made it into the court system because it was dropped by the RIAA as Felten agreed not to speak.

new watermarking technology designed to protect CDs from copyright infringement.[110] When Felten successfully cracked the code and announced that he would present his findings at an upcoming conference,[111] the RIAA and SDMI demanded instead that Felten not speak.[112] These organizations threatened both civil and criminal suits against Felten for violating the DMCA.[113] Eventually, Felten withdrew his paper and counter-sued the RIAA, alleging that his right to free speech was curtailed through the actions of the RIAA.[114] His suit was nevertheless dismissed.[115]

In the case of *Universal Studios, Inc. v. Reimerdes*,[116] Universal Studios sued the publisher of an online magazine for putting a code on its Web site, "2600.com," which described how to circumvent a general DVD copy protection system.[117] The publisher alleged that the lawsuit violated its First Amendment right to free speech,[118] but the Second Circuit found that the DMCA was constitutional.[119] Specifically, it held that First Amendment rights protecting free speech may be limited when the issue of unlawful circumvention of copyrighted materials is present.[120] The Second Circuit also rejected the publisher's contention that anti-circumvention portions of the DMCA essentially eliminated traditional notions of fair use.[121]

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[110] *See id.*

[111] The Fourth International Information Hiding Workshop Conference was held in April 2001. *See* Elec. Frontier Found., *Frequently Asked Questions About* Felten & USENIX v. RIAA *Legal Case*, *at* http://www.eff.org/Legal/Cases/Felten_v_RIAA/-faq_felten.html (last visited Apr. 15, 2004).

[112] *See* Gray & DeVries, *supra* note 70, at 25.

[113] *See id.*

[114] *See id.*

[115] *See id.* at 25 n.70 (noting that as reported in a press release, the recording industry is pledging not to pursue legal action against academic researchers).

[116] 111 F. Supp. 2d 294 (S.D.N.Y. 2000), *aff'd sub. nom.* Universal Studios, Inc. v. Corley, 273 F.3d 429, 458 (2d Cir. 2001).

[117] *Id.*

[118] *See Universal Studios*, 111 F. Supp. 2d at 444.

[119] *Id*. at 444–59.

[120] *Id*.

[121] *Id*.; *see* 17 U.S.C. § 1201(b) (Supp. 2002); Terri Branstetter Cohen, *Anti-Circumvention: Has Technology's Child Turned Against Its Mother?*, 36 VAND. J. TRANSNAT'L L. J. 961, 988 (2003).

B. Music Related Tensions

The mass reproduction of music through digital means is a problem that courts addressed before Congress passed the DMCA.[122] The DMCA emerged, however, as the major means to regulate the unlawful dissemination of digital music.[123] One crucial case of Internet music file sharing was not based on violations of the DMCA, but rather, on violations of the AHRA.[124] In 1998, the RIAA brought suit against Diamond Multimedia Systems ("Diamond") to stop Diamond from introducing a MP3 player called Rio into the marketplace.[125] Diamond was one of the first companies to market an MP3 player that could transfer files from a person's home computer onto a portable device, allowing for mobile MP3 technology.[126]

The district court in *Recording Industry Association of America v. Diamond Multimedia Systems, Inc.* reasoned that because the AHRA did not prohibit serial copying, and because converting songs from CD into MP3 format was a commonplace occurrence, there were no prohibitive, statutory violations.[127] On appeal, the Ninth Circuit affirmed the holding of the district court.[128] The court ruled that hard drives were considered "material objects" and that, because the Rio was essentially a hard drive, Rio was entirely exempt from any AHRA violation.[129] These dual holdings represented a major victory for manufacturers and consumers of

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122 *See* discussion *supra* Part I.B.

123 *See id.*

124 *See Diamond II*, 180 F.3d 1072 (9th Cir. 1999).

125 *See id.* MP3 is a technology that compresses songs into a small file while preserving much of the original sound quality. *See* whatis?com, *MP3*, *at* http://whatis.-techtarget.com/definition/0,,sid9_gci212600,00.html (last visited Apr. 5, 2004).

126 *See* Balaban, *supra* note 34, at 265 (citing Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 29 F. Supp. 2d 624, 625 [hereinafter *Diamond I*]).

127 *See Diamond I*, 29 F. Supp. 2d 624 (finding that, while the Rio player did violate the provision of the AHRA requiring all digital recording devices to have a serial copy management system, this violation was inconsequential because the function of a Rio with this system would have been identical to the model that Diamond produced), *aff'd*, *Diamond II*, 180 F.3d 1072 (9th Cir. 1999).

128 *See Diamond II*, 180 F.3d at 1080.

129 *See id.* at 1077; *see also* Balaban, *supra* note 34, at 267.

digital media, essentially opening the door for portable digital devices.[130]

The aforementioned *Napster* case had far-reaching effects because the recording industry continued to file numerous lawsuits against other file-sharing programs similar to Napster.[131] Most recently, the RIAA increased the intensity of the battle over illegal file sharing when, in September 2003, it filed suits against individual citizens accused of sharing pirated music.[132] The RIAA was able to obtain this information despite concerns of compromised privacy of citizens because the DMCA's "safe harbor" requirement, which mandates that ISPs give assistance if they wish to avoid liability.[133] Once the RIAA had access to the records of the ISPs, it was able to scan the uploading activity of individual users, obtain the unique Internet Protocol ("IP") addresses of those users, and subpoena the ISPs to retrieve the actual names and addresses of the infringing subscribers.[134] The resulting lawsuits primarily targeted individuals who uploaded—i.e., made songs available to the file-sharing programs—large numbers of music files.[135]

As of January 24, 2004, the RIAA announced settlements in 233 out of 382 suits with an average settlement of $3,000.[136] In addition, the RIAA announced an amnesty program for those people not yet sued—providing that they sign an affidavit

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[130] If *Diamond* had been decided in favor of the RIAA, then portable MP3 players would be illegal. *See Diamond II*, 180 F.3d at 1080. If this were true, one could argue that the current MP3 player revolution of the iPod and its various cousins would be unlawful.

[131] *See In re* Aimster Copyright Litig., 334 F.3d 643 (7th Cir. 2003) (holding that a preliminary injunction may be granted because plaintiff proved that defendant likely was guilty of both contributory and vicarious infringement and was causing irreparable harm); BuddyUSA, Inc. v. Recording Indus. Ass'n of Am., 21 Fed. Appx. 52 (2d Cir. 2001) (allowing plaintiff's suit for declaratory judgment concerning copyright infringement).

[132] *See* Wired News, *RIAA Lawsuits*, *supra* note 2.

[133] *See* 17 U.S.C. § 512(h) (2002); *see also* Carl Bialik, *Will the Music Industry Sue Your Kid?*, WALL ST. J., Sept. 10, 2003, at D1.

[134] *See* Bialik, *supra* 133. *But see* Recording Indus. Ass'n of Am. v. Verizon, 351 F.3d 1229 (D.C. Cir. 2003) (holding that Internet service providers ("ISPs") do not have to turn over names of their clients).

[135] *See* Bialik, *supra* note 133.

[136] *See* Paul Roberts, *RIAA Sues 532 'John Does'* (Jan. 21, 2004), *available at* http://www.pcworld.com/news/article/0,aid,114387,00.asp (last visited Apr. 15, 2004).

promising to remove the illegal songs from their computers and physically destroy any CDs containing pirated material.[137] While over 900 people have signed the agreements so far, those opposed to the RIAA's actions caution that because the RIAA is not agreeing to grant amnesty from individual copyright holders (namely, the artists and publishers themselves), a person who signs an agreement with the RIAA could still be sued for copyright infringement.[138] Nonetheless, it appears that the actions of the RIAA are at least somewhat effective considering that Kazaa, the nation's leading file-sharing program, has lost approximately forty-one percent of its users in the months surrounding the RIAA lawsuits.[139]

III. ANALYSIS

While some legislation is essential to prevent piracy, some laws, specifically the DMCA, are currently applied too broadly.[140] This has resulted in both a chilling of technological progress and ongoing infringement upon other rights assured to citizens through the Copyright Act of 1976.[141] Critics of recent legislation involving the Internet are often quick to denounce any laws that could infringe upon online freedoms,[142] but in the case of the DMCA, drastic reform is necessary to guarantee the advancement of digital technology. The record industry has an excellent business model of an industry which is beginning to successfully market their product on the Internet while avoiding rampant piracy.[143] One solution to the problem of piracy on the Internet is

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[137] *See* Bialik, *supra* note 133; *see also* Fred von Lohmann, *'Amnesty' for Music File Sharing Is a Sham*, L.A. TIMES, Sept. 10, 2003, at B13.

[138] *See* von Lohmann, *supra* note 137.

[139] *See* Jon Healy, *File Sharing Down After Lawsuits*, L.A. TIMES, Sept. 30, 2003, at C15.

[140] *See* discussion *infra* Parts III.A–.B; *see generally* 1976 Copyright Act, 17 U.S.C. § 101 (2003).

[141] *See* discussion *infra* Parts III.A–.B.

[142] *See, e.g.*, Elec. Frontier Found., *at* http://www.eff.org (last visited Apr. 7, 2004).

[143] *See infra* text accompanying notes 188–99.

DRM,[144] which, if properly implemented, will render the DMCA obsolete and provide a less intrusive and more effective market solution.[145]

A. The Problem With Section 1201 of the DMCA

The cases brought under section 1201 of the DMCA must be closely examined because their repercussions directly could affect the progress of new technology.[146] Specifically, the DMCA directly threatens fair use provisions that have been imbedded in the jurisprudence of the United States for decades, most importantly by federal statute in 1976.[147] In *Elcom*, the program created by the defendant was a benefit to society because it allowed Adobe Acrobat encoded files to be used in electronic media other than a laptop or desktop computer.[148] The charges against Skylarov were not that he himself infringed on a copyright, but rather that he created an algorithm that potentially could be used to circumvent copyrighted works.[149] His program cracked Adobe's technological code that protected its e-book format.[150] This program, however, also possessed a very important fair use exception that would have allowed the people who legally bought the e-books to freely transfer them to a portable, digital source at their convenience.[151]

SDMI's threatened case against Felton is similar to Sklyarov's case in many ways.[152] Though neither case ultimately resulted in convictions, the mere fact that both lawsuits were brought under section 1201 of the DMCA should give lawmakers pause.[153] Sklyarov's development was a potential boon to Adobe's e-book

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144 *See* Adams, *supra* note 22, at 225 ("DRMs are electronic countermeasures installed on an artist's work that notify the public of important rights in the work."). DRMs ideally act to stop unauthorized reproduction and distribution. *See id.*

145 *See infra* Part III.D.

146 *See infra* Parts II.A–.B.

147 *See* discussion *supra* Part I.D.

148 *See* EFF, *Sklyarov FAQ*, *supra* note 102.

149 *See id.*

150 *See id.*

151 *See id.*

152 *See supra* notes 101–15 and accompanying text.

153 *See* United States v. Elcom Ltd., 203 F. Supp. 2d 1111, 1119 (N.D. Cal. 2002); Gray & DeVries, *supra* note 70, at 24–25.

technology because it allowed greater mobility of the format.[154] Felten's decoding work was done for purely educational purposes, directed specifically toward the groups that later sued him—the RIAA and SDMI.[155] Suits of this nature may cause software developers to lessen their focus on certain areas of research and development.[156] The mere threat of a lawsuit, even if there is no eventual trial, may cause a company to hesitate about delving into a particular line of research and development.[157] And, if research and development is stifled, it could seriously compromise the advancement of future innovations in computer technology.[158]

The *Universal Studios* case, which ruled that free speech on the Internet may be legally curtailed,[159] shows that the DMCA can impact the fundamental rights guaranteed under the Constitution directly.[160] Here, as with the above examples, there was no actual copyright infringement by the defendants.[161] Instead, they were sued for posting on their Web site information on how to decode copy-protected DVDs.[162] This infringement on one's right to fair

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[154] *See Elcom*, 203 F. Supp. 2d at 1118–19 (finding that defendant's program enabled "a purchaser of an ebook to engage in 'fair use' of an ebook without infringing the copyright laws, for example, by allowing the lawful owner of an ebook to read it on another computer, to make a back-up copy, or to print the ebook in paper form").

[155] *See* Gray & DeVries, *supra* note 70, at 24–25.

[156] *See* Elec. Frontier Found., *Unintended Consequences: Five Years Under the DMCA*, *at* http://www.eff.org/IP/DMCA/20020503_dmca_consequences.html (Sept. 24, 2003) [hereinafter EFF, *Unintended Consequences*] (noting that renowned scientists have stopped important internet security research out of fear of prosecution).

[157] *See id.*

[158] *See* Timothy D. Casey & Jeffrey L. Magenau, *Chilling Effects of the U.S. DMCA on Cryptographic Research*, INTERNET SOCIETY MEMBER BRIEFING (Internet Soc'y), Oct. 2002 (stating that the anti-circumvention provisions of the DMCA, as well as other proposed legislation variously mandating or prohibiting the use of certain technologies, may have an adverse effect on the freedom to innovate, share information, and engage in heretofore permissible activity), *available at* http://www.isoc.org/briefings/008 (last visited Apr. 15, 2004); EFF, *Unintended Consequences*, *supra* note 156.

[159] *See* Universal Studios, Inc. v. Corley 273 F.3d 429, 458 (2d Cir. 2001) (holding that First Amendment and Copyright Clause issues could not be addressed in this particular case).

[160] *See* EFF, *Unintended Consequences*, *supra* note 156 (noting that the *Universal Studios* case barred a Web site from publishing materials, notwithstanding the First Amendment guarantee of freedom of the press).

[161] *See id.*

[162] *See id.*

use and free speech contradicts aspects of both the 1976 Copyright Act and the First Amendment.[163]

B. Technology Must Be Allowed to Develop Without Legislative Barriers

In many ways, the AHRA served as a harbinger of future legislation[164] and paved the way for the DMCA, which became a crucial point of contention in discussions relating to the protection of digital rights.[165] The cases brought under the DMCA have generated a considerable amount of media coverage and controversy.[166]

1. The AHRA

The AHRA represents a prime example of legislation that proved overly restrictive.[167] In the late 1980s, companies developed the DAT, which was a substantial technological improvement over existing media devices.[168] The AHRA's requirement that producers of DAT recorders relinquish a portion of their sales to the record companies in order to combat the expected illegal copying of copyrighted materials was a heavy burden on manufacturers.[169] The narrowed profit margin on DAT recorders deterred companies from heavily promoting the DAT with the end result being that DAT recorders now occupy a small, niche market.[170] Thus, the fear that DAT would encourage the proliferation of pirated songs hindered the growth of this promising technology.[171]

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[163] *See supra* notes 116–21 and accompanying text.

[164] *See* Balaban, *supra* note 34, at 250 (noting that while the AHRA may have addressed some concerns of the music industry, it did not apply to music shared over the Internet).

[165] *See supra* text accompanying notes 59–91.

[166] *See* Frank Aherns, *Music Industry Returns to Court; 2nd Wave of Suits Targets File-Sharing*, SEATTLE TIMES, Jan. 22, 2004, at E3; Bialik, *supra* note 133.

[167] *See, e.g.*, Skasko Rosenberg, *supra* note 21, at 495 (commenting on the failure of the DAT).

[168] *See* Balaban, *supra* note 34, at 246–47.

[169] *See* Nichelle Nicholes Levy, *Method to Their Madness: The Secure Digital Music Initiative, A Law and Economics Perspective*, 5 VA. J.L. & TECH 12, 27 (2000) (asserting that the AHRA was directly responsible for DAT's lack of popularity).

[170] *See id.*

[171] *See supra* notes 168–70 and accompanying text.

The *Diamond* case demonstrates that interpretations of law that govern digital technology may threaten scientific progress.[172] The RIAA's goal in bringing this litigation under the AHRA was to prohibit production of the Rio player.[173] While the Ninth Circuit found no prohibitive DMCA violations inherent in the Rio player,[174] it is quite possible that portable MP3 players would be illegal today if the RIAA had won its case.[175]

2. The DMCA

The RIAA's lawsuit against Napster tested the borders of the DMCA.[176] The Ninth Circuit's decision was sound: it was able to stop the illegal trading of music through the Napster servers without invading the privacy rights of the individuals who used the Napster software.[177] The biggest problem with the *Napster* decision is the progression of file-sharing technology since then—computer owners now transfer files without an intermediary server through programs like Kazaa, LimeWire, and BearShare.[178] Because these Web sites do not have a central server and instead allow file sharing to occur directly between their members, it is difficult to hold these Web sites liable for contributory or vicarious liability as the court did in *Napster*.[179] Accordingly, the RIAA's recent lawsuits directly focus on illegal trade of music done by individuals.[180]

In 2003, the RIAA used section 512 of the DMCA to require that ISPs assist in the investigation of their members in exchange

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[172] *See generally supra* notes 125–30 and accompanying text.

[173] *See supra* notes 125–30 and accompanying text.

[174] *See id.*

[175] *See id.*

[176] *See supra* notes 71–91 and accompanying text.

[177] *See generally Napster II*, 239 F.3d 1004 (9th Cir. 2001).

[178] *See* Kazaa, *Peer-to-Peer (P2P) and How KMD Works*, *at* http://www.kazaa.com/us/help/glossary/p2p.htm (last visited Apr. 13, 2004); ; LimeWire, *LimeWire: Running on the Gnutella Network*, *at* http://www.limewire.com/english/-content/development.shtml (last visited Apr. 15, 2004); BearShare, *at* http://www.-bearshare.com (last visited Apr. 15, 2004).

[179] *See supra* text accompanying notes 71–91.

[180] *See* Recording Indus. Ass'n of Am. v. Verizon, 351 F.3d 1229, 1231–33 (D.C. Cir. 2003) (reviewing the background of the RIAA's actions against individuals who downloaded music).

for escaping liability.[181] This section is problematic because it allows private entities, who are investigating potential copyright infringers, to invade the ISPs user's constitutionally protected right to privacy.[182] Indeed, District of Columbia Circuit Court recognized these concerns in *Recording Industry Association of America v. Verizon* when the court held that section 512 of the DMCA did not require ISPs to hand over the names of their clients.[183]

The RIAA's lawsuits serve as a threat, not just to those who trade illegal music, but to all members of our society who take advantage of fast and legal file transfers in their everyday lives.[184] The RIAA's tactics will serve to make people overly wary of their Internet privacy that could, in turn, lead to a decreased use in file-sharing programs.[185] The right to privacy on the Internet is no less important than the right to privacy in every other context of American life. Americans using the Internet should not be forced to worry about the violation of their right to privacy through a constitutionally suspect interpretation of the law.[186]

C. A Vaccine for the File-Sharing Epidemic?

The original Rio was not a particularly powerful MP3 player,[187] but its presence in the marketplace commenced a

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[181] *See* Chilling Effects, *Frequently Asked Questions (and Answers) About DMCA Subpoenas*, *at* http://www.chillingeffects.org/dmca-sub/faq.cgi (last visited Apr. 7, 2004).

[182] *See id.* (noting that one's Internet usage could be improperly monitored when there was no copyright violation). *But see* Adam R. Fox, *The Digital Millennium Copyright Act: Disabusing the Notion of a Constitutional Moment*, 27 RUTGERS COMPUTER & TECH. L. J. 267, 287 (2001) (stating that "[t]he Internet has not been a part of the American culture long enough to determine the impact of the potential First Amendment infringements that ISP compliance with the DMCA might occasion").

[183] *See generally Verizon*, 351 F.3d 1229 (D.C. Cir. 2003).

[184] *See* EFF, *Unintended Consequences*, *supra* note 156.

[185] *See id.*

[186] *See* Letter from Alliance for Public Technology et al., to Sen. John McCain, Chairman, Senate Commerce, Science and Transportation Committee (Sept. 4, 2003), *available at* http://www.eff.org/IP/P2P/committee_letter/080603_Commerce_McCain.-pdf (last visited Apr. 15, 2004).

[187] *See* RioWorld, *Diamond Rio 300*, *at* http://www.rioworld.org/rio300-new.htm (last visited Apr. 7, 2004) (showing that the earliest version of the Rio player had a storage capacity of only thirty-two megabytes). The Rio 300, which was released in 1998, was the first Rio player. *See id.*

significant technological progression toward developing faster and larger portable players.[188] In fact, the proliferation and success of the audio devices that the music industry once tried to eliminate may be, ironically enough, what allows the record industry to enjoy ample profits in the twenty-first century. Recent Web sites like iTunes, Musicmatch, and the new Napster have received the blessing of the RIAA and allow users to browse a library of music.[189] Consumers can purchase these songs for either ninety-nine cents per song or $9.99 per album.[190] The digital files may be listened to an infinite number of times and also are easily transferred from a computer to a portable, digital device.[191]

1. The Successful Business Model of the Recording Industry

The major record labels that have allowed their libraries to be licensed (at least in part) to online sites, represent a positive step. These labels now see that they can best combat piracy by offering a cheap, easy alternative.[192] People do not want to be thought of as thieves, but they also do not want to feel like they are being taken advantage of—a frequent complaint when a CD costs $20 for the consumer, but only $2 or $3 for the record company to produce.[193]

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[188] *See, e.g.*, Apple, iPod + iTunes, *iPod*, *at* http://www.ipod.com (last visited Apr. 7, 2004). Apple's iPod is the current leader in the portable MP3 arena. The iPod currently comes in fifteen, twenty, or forty gigabytes models and has numerous other features, including the ability to store contacts, a calendar, and a labeling feature that automatically reads the CD information and extracts the artist's name and album and song title. *See id.*

[189] *See generally* Apple, iPod + iTunes, *iTunes*, *at* http://www.apple.com/itunes/-overview.html (last visited Apr. 15, 2004); Musicmatch, *at* http://www.musicmatch.com (last visited Apr. 7, 2004); Napster, *at* http://www.napster.com (last visited Apr. 7, 2004).

[190] *See supra* note 189.

[191] Information can transfer at up to 400 megabytes per second through Firewire or USB 2.0 technology. Assuming the average song is roughly five minutes, one minute equals one megabyte space on a hard drive, and there are an average of ten songs per album, optimum transfer speed could theoretically approach eight albums a second (though in practice it never seems to go quite that fast). Apple, Hardware, *FireWire*, *at* http://www.apple.com/firewire (last visited Apr. 15, 2004).

[192] *See* Alfred Hermida, *Online Scramble for Music Downloads*, BBC News, *at* http://news.bbc.co.uk/2/hi/technology/3409089.stm (noting that over the last twelve months, major record labels have realized the profits available from online retailing) (last updated Jan. 19, 2004).

[193] *See Record Industry Should Embrace Online Services*, L.A. TIMES, May 25, 2003 at C13 (stating that "[c]ollege students described record companies as evil conglomerates

Paying $10 for an album that, a year ago, would have cost closer to $17 is commendable progress.[194] In sum, the answer to stopping rampant theft on the Internet does not involve the unrealistic goal of stopping piracy altogether.[195] Rather, businesses must focus on legitimate alternatives to piracy that are affordable and easy to understand.[196]

The business model for distributing music over the Internet is a successful one.[197] Companies such as Dell, Hewlett-Packard, and Wal-Mart are scrambling to enter the field of online music downloading.[198] The legitimacy and success of the aforementioned music Web sites should quell the concerns of the RIAA, which was angered by the rampant piracy that was present on file-sharing networks. The actions of the music industry, however, should be closely watched by all other areas of business that feel that their products may be harmed by piracy on the Internet.[199] Companies like Adobe and Universal Studios, who brought cases under section 1201 of the DMCA, should note that filing lawsuits against fringe abusers represents a misplaced effort: rather than trying to prosecute the occasional, or even inadvertent, infringer, these companies should aggressively pursue solutions that will let them profit and embrace the evolution of

who shove mediocre music down their throats at inflated prices and then gouge the artist's profits").

[194] *See* James K. Wilcox, *Where Have All the CDs Gone*, Sound & Vision Online, *at* http://soundandvisionmag.com/article.asp?section_id=1&article_id=453&page_number=1 (June 2003) (noting that, in 2002, the true average price of a CD was over seventeen dollars).

[195] *See* Doris Estelle Long, *E-Business Solutions to Internet Piracy: A Practical Guide*, *in* HANDLING INTELLECTUAL PROPERTY ISSUES IN BUSINESS TRANSACTIONS 2003, at 769, 783–84 (PLI Pats., Copyrights, Trademarks, & Literary Prop. Course, Handbook Series No. G0-019U, 2003) (noting that people consider digital piracy to be unavoidable).

[196] *See infra* notes 197–200 and accompanying text.

[197] *See* John Schwartz & John Markoff, *Power Players: Big Names Are Jumping Into the Crowded Online Music Field*, N.Y. TIMES, Jan. 11, 2004, at C1 (noting that consumers bought over 3.5 million MP3 players in 2003, and that the legitimate downloading of songs is expected to undergo rapid growth considering the abundance of residential high speed Internet access and substantial marketing efforts).

[198] *See id.*

[199] *See generally* Thomas Fedorek, *Computers + Connectivity = New Opportunities for Criminals and Dilemmas for Investigators*, 76 N.Y. ST. B.J. 10 (Feb. 2004) (reviewing a myriad of different crimes that may be committed through the Internet).

technology.[200] For example, Adobe could make use of an embedded code that limits the number of times a particular file can be transferred between media. Under this model, the interests of both the consumer and the company can be satisfied.

2. Eliminating the DMCA

As businesses come to fully appreciate the efficient ways that information can be passed over the Internet, market solutions like the one recently implemented by the music industry will become more common.[201] Then, there likely will be no need for overreaching and harmful legislation like the DMCA in its current form. Instead, legislators and administrative agencies likely will be able to create laws that have a specific, enumerated list of what constitutes copyright infringement on the Internet. This process commenced with the October 2003 exemptions to the anti-circumvention rules of the DMCA.[202] These rules, which the Library of Congress enacted pursuant to the DMCA, sought to more accurately pinpoint the application of section 1201.[203] Though the list is relatively short, it shows that limiting the scope of the DMCA is a concern of Congress and administrative agencies.[204]

One of the purposes of the DMCA was to draft a legislation that allayed the concerns of copyright owners—specifically the mass pirating of their works over the Internet.[205] The marriage of online services with the recording industry demonstrates that there is an available resolution to the illegal, widespread reproduction of copyrighted works.[206] Because a market solution is in place, the

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[200] *See* United States v. Elcom Ltd., 203 F. Supp. 2d 1111 (N.D. Cal. 2002); Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d. 294 (S.D.N.Y. 2000), *aff'd sub. nom.* Universal Studios, Inc. v. Corley, 273 F.3d 429, 458 (2d Cir. 2001).

[201] *See supra* notes 187–95 and accompanying text.

[202] *See* U.S. Copyright Office, *Rulemaking on Exemptions From Prohibition on Circumvention of Technological Measures That Control Access to Copyrighted Works*, *at* www.copyright.gov/1201 (last visited Apr. 15, 2004).

[203] *See id.*

[204] *See id.*

[205] *See* EFF, *Unintended Consequences*, *supra* note 156.

[206] *See* Reuters, *Reaping Profit From Peer-to-Peer* (Dec. 11, 2003) [hereinafter Reuters, *Reaping Profit*] (noting that software conglomerates are teaming up with record

DMCA as it exists is no longer needed. Instead, the numerous laws that the U.S. government implemented before the DMCA are more than adequate to deal with problems in the digital age.[207] For example, anti-hacking statutes like the Computer Fraud and Abuse Act,[208] and the Electronic Communications Privacy Act[209] envelop many substantive violations that are also covered by the DMCA and its complementing state statutes.[210] The DMCA anti-circumvention provisions, however, can make it virtually impossible to circumvent copyrighted material legally.[211] This aberration might allow large companies to successfully threaten legal action against smaller companies, even if the latter were engaging in legal, competitive activities that involved the larger companies' network.[212]

The first person convicted under the DMCA sold hardware that allowed free access to DirecTV broadcasts.[213] Even without the DMCA, however, the defendant still would have been guilty of one count of conspiracy and two counts of selling hardware that unlawfully decrypted the broadcasts.[214] In this suit, the DMCA's role was completely redundant.[215]

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companies to distribute digital content online), *available at* http://www.wired.com/-news/technology/0,1282,61561,00.html (last visited Apr. 15, 2004).

[207] *See* John Alan Farmer, Note, *The Specter of Crypto-Anarchy: Regulating Anonymity-Protecting*, 72 FORDHAM L. REV. 725, 761 (2003) (emphasizing that there is already ample legislation for many crimes that can also be tried under the DMCA); Paul Festa, *Jury Convicts Man in DMCA Case*, CNET News.com, *at* http://news.com.com/2100-1025-5080807.html (Sept. 23, 2003).

[208] The Computer Fraud and Abuse Act of 1986, 18 U.S.C. § 1030 (2002).

[209] *Id.*

[210] *See* Fred von Lohmann, *State "Super-DMCA" Legislation*, EFF, *at* http://www.eff.org/IP/DMCA/states/200304_sdmca_eff_analysis.php (last visited Apr. 19, 2004).

[211] *See* EFF, *Frequently Asked Questions (and Answers) About Anticircumvention (DMCA)*, *at* http://www.chillingeffects.org/anticircumvention/faq.cgi (last visited Apr. 19, 2004).

[212] *See generally id.*

[213] *See* Festa, *supra* note 207; *see also* Press Release, Dep't of Justice, Federal Jury Convicts Smart-Card Hacker for Violating Digital Millennium Copyright Act (Sept. 22, 2003), *available at* http://losangeles.fbi.gov/2003/dmca092203.htm (last visited Apr. 15, 2004).

[214] *See* Festa, *supra* note 207.

[215] *See id.*

Peer-to-peer file sharing can be a beneficial technology.[216] As mentioned above, laws that threaten this technology could prove detrimental to achievements wholly unrelated to illegally traded music.[217] Richard Clarke, the former Chief of Cyber Security for the Bush Administration, urged the reformation of the DMCA when he opined, "'I think a lot of people didn't realize that it would have this potential chilling effect on vulnerability research.'"[218] Even if one were to argue that the DMCA was useful at its inception, judicial interpretations of the DMCA transformed it into a body of law that encroaches on long-settled rights guaranteed under the Constitution.[219]

D. Digital Rights Management Can Stop Piracy More Effectively Than the DMCA

There is not one favored format of DRM, but the most widely approved model of this technology likely is the "Tax and Royalty System" proposed by William "Terry" Fisher.[220] Under this model, a tally is run every time a digital work is accessed, and ISPs that host the work are accordingly taxed.[221] These taxes then are used as royalties to pay the relevant copyright owners.[222] The user likely would pay for the digital tax either through a monthly bill that is fixed in price or by individual access to a particular work.[223]

Fisher's model requires specific legislation to determine exactly how and when a tax applies to digital copyrighted materials.[224] By contrast, commentator Lionel Sobel proposed an alternative to this model whereby ISPs act as digital retailers.[225]

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[216] *See* Neil Weinstock Netanel, *Impose a Non-Commercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 2 (2003) (emphasizing that peer-to-peer technology has an important place in society).

[217] *See supra* text accompanying notes 157–58, 163.

[218] Hiawatha Bray, *Cyber Chief Speaks on Data Network Security*, BOSTON GLOBE, Oct. 17, 2002, at C2 (quoting Richard Clarke).

[219] *See* discussion *infra* Part III.A.

[220] *See* Lionel S. Sobel, *DRM as an Enabler of Business Models: ISPs as Digital Retailers*, 18 BERKELEY TECH. L.J. 667, 672 (2003).

[221] *See id.* at 674.

[222] *See id.*

[223] *See id*.

[224] *See id.*

[225] *See id.* at 680–82.

Legislation is minimal under this approach.[226] One requirement is the "watermarking" of all works included under this model.[227] In this context, "[w]atermarks are digital identifications inserted into digital copies of works at the time they are manufactured."[228] Once the work is watermarked, ISPs easily can track a copyrighted work as it moves through their servers and note which of their users have accessed the works.[229] The copyright owner sets the prices for his or her works, although the actual licensing of materials to the ISPs would be mandated by statute.[230] In turn, the ISPs could determine a price to charge their subscribers.[231]

One can find praise and criticism for both Fisher's and Sobel's models. A common thread in both is that the law does not dictate the progression of digital copyrights.[232] Under both models, the law acts more like a mediator than a regulator.[233] Specifically, setting up tax provisions or requiring copyright owners to license their materials represents the extent of the law's presence in these respective scenarios.[234] It is the market that acts as the regulator: if the prices are appropriate, then the inclination to steal is lessened, as is evidenced by iTunes.[235]

While, in theory, DRM is presented as something that will reduce piracy and allow both consumers and the large electronics companies to benefit, it also could be combined with section 1201 of the DMCA to create severe restrictions on fair use.[236] For example, DRM could force consumers to "pay-per-listen" for a song much in the same way they now "pay-per-view" for a movie.[237] In the aforementioned proposals, a purchase of digital materials from an ISP grants the consumer a license similar to that

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226 *See id.* at 686.
227 *See id.* at 681.
228 *See id.*
229 *See id.* at 681.
230 *See id.* at 680–83.
231 *See id.*
232 *See generally id* at 674, 680–83.
233 *See id.* at 686–87.
234 *See id.* Please note that, while Fisher's model does involve a more comprehensive and complex legal scheme than Sobel's, it is not overly intrusive. *See generally id.*
235 *See* VON LOHMANN, FAIR USE, *supra* note 96.
236 *See id.*
237 *See id.*

granted to users who buy a CD; a consumer would not have to pay every time he or she wanted to access the material.[238]

DRM in conjunction with DMCA enforcement also could profoundly restrict reverse engineering of software or electronics products, a major source of technological advancement.[239] It could discourage fair use by prohibiting the use of copyrighted materials for academic and research purposes.[240] Furthermore, it could halt the expansion of the fair use exception into other avenues of technology that are presently unknown because they are not yet developed.[241] For these reasons, DRM represents a benefit to society only if the current version of the DMCA is altered severely.[242] If both the limits on fair use and the anti-circumvention provisions of section 1201 are repealed it will ensure that DRM-based business models are allowed to flourish.[243] Similarly, a drastic lessening of section 512's power seems necessary because if the ISPs are given the power to control the market, it would be inefficient to waste time and money on thwarting a relatively low number of illegal files. Rather, the ISPs could focus on promoting the dissemination of a far greater number of legal transfers.

If Fisher's or Sobel's model is widely implemented and the DMCA is not amended to allow for these models, many of the above impairments on users' and developer's rights could become a reality.[244] Perhaps sensing the impending change in the market, Congress already has proposed two bills to limit the reach of the DMCA.[245] Congress has not enacted either proposal, however.[246]

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238 *See* Sobel, *supra* note 220, at 674, 680–81.

239 *See* VON LOHMANN, FAIR USE, *supra* note 96.

240 *See id.*

241 *See id.*

242 *See supra* text accompanying notes 201–18.

243 *See id.*

244 *See generally* VON LOHMANN, FAIR USE, *supra* note 96.

245 The 107th Congress introduced the Digital Choice and Freedom Act of 2002 ("Digital Choice Act"). H.R. 5522, 107th Cong. (2002). This bill determined that the DMCA was founded in an attempt to balance traditional rights of copyright owners with new concerns over illegal file transfers. *See id.* The bill also stated, however, that in application the DMCA has "endangered the rights and expectations of legitimate consumers." *Id.* § 2(6). The bill further states, "Contrary to the intent of Congress, [the DMCA] has been interpreted to prohibit all users—even lawful ones—from

Critics of DMCA reform believe that sections 512 and 1201 are necessary to protect copyright owners from infringement.[247] These DMCA supporters think that the law successfully balances the concerns of copyright owners and the public.[248] Proponents of the DMCA envision a world where copyright owners retain a stranglehold on the rights of their works.[249] Professor Jane Ginsberg believes that a pay-per-listen system or one where a user retains a song for a limited time are reasonable ways that a consumer can enjoy digital music under the DMCA.[250] This model is far less preferable to the consumer, however, than the iTunes business model where the consumer can retain the digital music file.[251] Critics should accept a system where the market, not the law, governs file transfers on the Internet.[252] Under such system, the goals of the copyright owner and the consumer will be more effectively met than under the DMCA.

circumventing technical restrictions for any reason." *Id.* § 2(7). The bill goes on to note that the DMCA restricts consumers from exercising fair use rights, and then establishes an enumerated list of situations in which users of digital technology may circumvent a technological measure if it is for a non-infringing use. *See id.* The 108th Congress introduced a bill in 2003, mandating that all CDs with DRM technology have labels alerting the consumer of the presence of DRM. *See* H.R. 5544, 108th Cong. (2003). This bill also contains a provision similar to the Digital Choice Act, as it proposes a broadening of fair use terms under section 1201 of the DMCA. *See id.* While neither of these bills have been passed into law, it shows that Congress realizes the harm that the DMCA can inflict, the benefits that DRM can have, and how the two may be largely irreconcilable. *See id.*

[246] *See supra* note 235.

[247] *See, e.g.*, Edward Felten, *The Digital Millennium Copyright Act and Its Legacy: A View From the Trenches*, 2002 U. ILL. J.L. TECH. & POL'Y 289 (2002); Jane Ginsberg, *How Copyright Got a Bad Name for Itself*, 26 COLUM.-VLA J.L. & ARTS 61, 68, 70 (2002).

[248] *See* Carolyn Andrepoint, *Digital Millennium Copyright Act: Copyright Protections for the Digital Age*, 9 DEPAUL-LCA J. ART & ENT. L. & POL'Y 397 (1999) (stating that "[t]he Act successfully provides for both the fostering of creative genius within the artistic community, and the fair use of works deriving from that genius").

[249] *See* Ginsberg, *supra* note 247, at 71.

[250] *See id.*

[251] *See supra* text accompanying notes 189–91.

[252] *See generally* Part III.C.

CONCLUSION

The Internet is a revolutionary technology whose borders are not yet known. It is naive to think that the first draft of a corpus of laws to govern the Internet would be perfect. Nonetheless, lawmakers and citizens alike need to be aware of the possible repercussions of laws like the DMCA. Companies who feel that they have been severely harmed by file sharing on the Internet need to form realistic, long-term solutions such as those made by the record labels. With the United States in a severe economic slump right now,[253] the labels saw that few citizens would take pity on super-corporations when they complained of illegal song-swapping.[254] Instead of aggressively chasing down and threatening file-sharing programs and individual infringers, the labels were wise to focus on a more pliable business model for the twenty-first century.

The problems encountered by the music industry most likely will confront every form of mass produced art and many forms of computer technology. In this regard, it is vital for both the major companies and U.S. consumers to remember that the foundation of any copyright law is to ensure progress. Advancement in the arts and technology will continue to be hindered by burdensome laws like the DMCA. The Constitution states that "Congress shall have Power . . . To promote the progress of science and useful arts,"[255] and this is an impossibility if the DMCA continues to exist in its current form. The Internet can best combat piracy within the scheme of a DRM-driven market solution, in which the economy, not the legislature, will regulate the materials in question. This will guarantee the preservation of rights for those who purchase intellectual property. More importantly, however, this model will

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[253] *See US Tells G7 to Do More on Recovery*, WASH. POST, May 18, 2003, at A15 (noting that the United States, Japan, Germany, France, Britain, Italy, and Canada are all in a two-year economic recession).

[254] *See* Benny Evangelista, *RIAA Warns 204 More People It Plans to Sue*, S.F. CHRON., Oct. 18, 2003, at B1 (noting that the record industry alleges a thirty-one percent drop in sales over the last three years, something they say is mostly attributable to the stealing of music through file-sharing programs).

[255] U.S. CONST. art. I, § 7.

optimize the continued production and transfer of intellectual property into the foreseeable future.